TITLE V PERMIT ENGINEERING EVALUATION

YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT 1947 Galileo Court, SARP 469, DANS, VEMBER 16 A-1-96F

APPLICATION COMPLETENESS DATE: May 1, 1996

EVALUATION COMPLETENESS DATE: June 3, 1997

DISTRICT ENGINEER: Lynn Finley

SIC CODE: 4911

FACILITY INFORMATION:

Facility Name: Woodland Biomass Power Ltd.

Location: 1786 Kentucky Avenue, Woodland, CA

Mailing Address: P.O. Box 1560, Woodland CA

Responsible Official: D. Randall Bates

Site Contact Person: D. Randall Bates

FACILITY DESCRIPTION:

Woodland Biomass Power Ltd.(WBPL) is a 28 megawatt steam turbine which is driven by steam generated from a biomass fuel fired boiler. The boiler combustion system consists of a circulating fluidized bed boiler with limestone injection for control of sulfur oxide emissions. Thermal De-NOx, ammonia injection, is used for controlling Nitrogen Oxides (NOx). Stage combustion is used for controlling Carbon Monoxide (CO) and Volatile Organic Compounds (VOC) emissions. Particulate emissions are controlled by a baghouse filtration system.

INSIGNIFICANT EMISSIONS UNIT INFORMATION

Office Air Conditioners: This facility has an air conditioner considered to be an

insignificant emissions unit based on District Rule 3.2,

Section 103.

End Loader: This facility has an end loader which is an insignificant

emissions unit based on District Rule 3.2, Section 101.2

SIGNIFICANT EMISSIONS UNIT INFORMATION

COMBUSTION UNITS

Permit P-105-90, Circulating Fluidized Bed Boiler System

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PROCESS DESCRIPTION: Circulating fluidized bed boiler system used in

the production of power.

EQUIPMENT INVENTORY:

Total Air Fan Flakt Total Air Fan

Model HACB 100-227

700 HP

Primary Air Fan Flakt Primary Air Fan

Model HACB 090-193

400 HP

Sealing Air Fan Flakt Sealing Air Fan

Model HDCB-3-020

100 HP

Seal Air Blower Hoffman Seal Air Blower

Model 7410 3A1

150 HP

Recirculating Air Fan Flakt Recirculating Air Fan

Model HACP-063-145

60 HP

Induced Draft Fan Flakt Induced Draft Fan

Model HACP-140-302

1250 HP

Boiler Gotaverken Circulating Fluidized Bed

Model 722-118

250,000 lbs/hr at 900 lbs/900°F

Permit P-51-94 Emergency Power Generator

PROCESS DESCRIPTION: Diesel fueled internal combustion engine

Emergency Power Generator.

EQUIPMENT INVENTORY:

Power Generator One (1) Caterpillar internal combustion engine, diesel

fueled, emergency power generator, Model No. 3412,

Serial No. 81Z07888, 890 brake horsepower.

Permit P-52-94 Emergency Fire Pump

Run Date: April 15, 1998

PROCESS DESCRIPTION: Diesel fueled internal combustion engine.

Emergency Fire Pump.

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EQUIPMENT INVENTORY:

Fire Pump One (1) Caterpillar internal combustion engine, diesel

fueled, emergency fire pump, Model No. 3208, Serial

No. 90N71122, 185 brake horsepower.

GENERAL EMISSION UNITS

<u>Permit P-90-89a Hydrated lime, Sodium bicarbonate Receiving and Storage with injection unit</u>

PROCESS DESCRIPTION: Hydrated Lime/Sodium Bicarbonate receiving

and storage unit with injection system for boiler exhaust gas SO₂ control. Lime is injected

upstream of baghouse to precoat bags.

EQUIPMENT INVENTORY:

Storage Silo 1200 cubic feet storage capacity unit with baghouse

Injection Blower 5 H.P. motor driven 1480 cfm blower

Rotary Gate .75 H.P., Rotary Gate

Cross Auger 1 H.P. cross Auger

CONTROL EQUIPMENT INVENTORY:

Dust collection system: Bag House on storage silo 6 element filter with jet

cleaning

Permit P-93-89, Sand Receiving and Storage

PROCESS DESCRIPTION: Sand receiving and storage unit with injection

system for batch loading to boiler.

EQUIPMENT INVENTORY:

Run Date: April 15, 1998

Storage Silo 1230 cubic feet storage capacity unit with baghouse

Pneumatic Conveyor 666 lb/hr, batch feed to boiler System combustor

CONTROL EQUIPMENT INVENTORY:

Dust collection system: Bag House on storage silo 20 element filter with jet

cleaning

Permit P-92-89a Clay/limestone Receiving and Storage with Injection to Boiler

PROCESS DESCRIPTION: Clay/Limestone receiving and storage unit with

injection system to boiler combustion.

Woodland Biomass Application #:A-1-96F Page 3 of Page 52 **EQUIPMENT INVENTORY:**

Storage Silo 1230 cubic feet storage capacity unit with

baghouse

Pneumatic Conveyor 500 lbs/hr, batch feed to boiler S y s t e m

combustor

CONTROL EQUIPMENT INVENTORY:

Dust collection system: Bag House on storage silo 20 element filter with

jet cleaning,

Permit P-50-94a Hydrated lime Storage and Mixing

PROCESS DESCRIPTION: Hydrated Lime Storage and Mixing

EQUIPMENT INVENTORY:

Screw Feeder: Metalfab, Model DB-1, Screw Feeder, 0.75 HP

Slurry Mixer: Lightin, Model XJ-30, Slurry Pump, 0.3 HP

Slurry Pump #1: Wilfley, Model K with a Reliance Model XT, TEFC 3 HP

motor

Slurry Pump #2: Wilfley, Model K with a Reliance Model XT, TEFC 3 HP

motor

CONTROL EQUIPMENT INVENTORY:

Baghouse: Griffin Environmental Company, Model JV-24-6X

24 Bags, 16 ounce polyester felt, 2 HP, 920 CFM

Permit P-61-89a Fuel Material Receiving and Storage (excluding rice hulls)

PROCESS DESCRIPTION: Fuel material receiving, processing, and storage

operation (excluding rice hulls)

EQUIPMENT INVENTORY:

Run Date: April 15, 1998

Fuel unloading truck tipper #1 120 HP Fuel unloading drag chain 20 HP Fuel unloading truck tipper #2 120 HP Fuel stacking conveyor A 30 HP Fuel stacking conveyor B 8 HP Fuel feed conveyor "E" Belt 40 HP Primary fuel reclaimer 15 HP Secondary fuel reclaimer 20 HP Boiler fuel feed conveyor C 15 HP Vibrating fuel sizing screen 15 HP

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Disc type fuel sizing screen	5 HP
Hog type wood sizing mill	200 HP
Spike roller with Reliance motor	5 HP
F-belt for pits and shells	10 HP
Boiler feed conveyor D	<u> 20 HP</u>
Total Production HP	643 HP

CONTROL EQUIPMENT INVENTORY:

Dust suppression sprays at: Outlet chute of stacking conveyor A

Outlet chute of stacking conveyor B Discharge from secondary fuel reclaimer

Fuel unloading tipper #1 Fuel unloading tipper #2 Dust Suppression Truck

Dust collection system: Bag House on Boiler Surge Bin

1.5 HP Miko Pulsaire

81S-8-40 "C"

Bag House on Hog Tower

5 HP Miko Pulsaire # 25S6-30 "B"

Permit P-34-94 Rice Hull Receiving, Storage and Shipping

PROCESS DESCRIPTION: Rice hull receiving, storage, and shipping.

EQUIPMENT INVENTORY:

Conveyors #1-A &B Screw Conveyors

16" O.D. x 16' Long, 5 HP each (20

one drop point enclosed

Mfr. Laidig, Inc. Dumps into Infeed #2

Conveyor #2 Screw Conveyor

30" O.D. x 17' Long, 15 HP

Conveyor #3 Bucket Elevator

16" x 8" cups, dual row, 15 HP

one drop point, enclosed

Mfr. Hance Corp. Dumps into Cross

Screw Conveyor #4

Conveyor #4 Screw Conveyor

24" Diameter x 22' long, 7 1/2 HP

one drop point, enclosed

Mfr. Laidig, Inc. Dumps to storage silo

Woodland Biomass Application #:A-1-96F Page 5 of Page 52 Conveyor #5A Silo Reclaimer Screw Conveyor

Stepped from 18" O.D. to 13" O.D., 50 HP

one drop point, enclosed

Mfr. Laidig, Inc.

Dumps into bucket Elevator Conveyor #6

Conveyor #6 Bucket Elevator

16" x 8" cups, 7 1/2 HP

35' high

one drop point, enclosed

Mfr. Hance Corp.

Dumps into Belt (tube) Conveyor #7

Conveyor #7 Belt tube Conveyor

18" O.D. x 122' Long, 15HP

226 FPM belt speed one drop point, enclosed Mfr. Mid-State Contracting, Inc. Dumps into Metering Bin

Conveyors #8 Pneumatic Boiler Feed Conveyors

10" O.D. x 55' Long, (4) Four delivery points

Mfr. Laidig Inc.

Four Blowers, 20 HP each

Mfr. Ammerman Co. Delivers rice hulls from metering bin into boiler.

Storage Silo 30' x 80' concrete silo

Totally enclosed Mfr. Laidig, Inc.

Approx. 200 tons storage

Rotary Air Locks 20" O.D. x 19 " wide, 1 1/2 HP each (4)

Manufacturer: General Resource Corp.

CONTROL EQUIPMENT INVENTORY:

Run Date: April 15, 1998

Dust Collector Metering Bin Vent Baghouse

9 Bags, 6 in. dia. 44 sq. ft. filter area,

530 CFM @ 1" H2O, 0.5 HP Manufacturer: MAC Equipment Co.

Model 36 AV 59

Dust control for metering bin vent

Permit P-91-89a Flyash Out loading and transfer System

PROCESS DESCRIPTION: Flyash out-loading and transfer system.

Transfers ash from boiler baghouse to silo for

loading to tractor trailers.

EQUIPMENT INVENTORY:

Storage Silo 3500 cubic feet storage capacity unit with baghouse

Rotary Valve 1.5 H.P.

Water Mixer 10 H.P Ash/Water Mixer for out loading to tractor trailer

Drag Conveyor 5.0 H.P Drag Conveyor

CONTROL EQUIPMENT INVENTORY:

Dust collection system: Bag House, single element filter, 1.5 HP

Permit P-94-89 Anhydrous Ammonia Storage and Receiving

PROCESS DESCRIPTION: Anhydrous Ammonia storage and receiving for

use in Thermal De-NOx unit.

EQUIPMENT INVENTORY:

Storage Tank 20,000 gallon capacity

Permit P-74-94 Cooling Towers

PROCESS DESCRIPTION: Cooling Tower

EQUIPMENT INVENTORY:

Cooling Tower Hammon, HUC-3448, w/2-125 HP fans, 20,765 GPM,

Air Rate 2@ 2776 klb/hr.

CONTROL EQUIPMENT INVENTORY:
Drift Control:
Mist Eliminators

Permit P-31-94a Sand Screening Operation

PROCESS DESCRIPTION: Screening of bottom boiler sand for reuse

EQUIPMENT INVENTORY:

Run Date: April 15, 1998

Conveyor 3 HP, 30 foot belt conveyor

Screen 1 HP, Smico Shaker Screener

Air Separator 1 HP, Air Separator w/ 10' Belt Conveyor

Federally Enforceable Criteria Pollutant Emission Limits (tons per year) (ALSO DISTRICT ENFORCEABLE)					
Emission Unit Name	NO _x	SO _x	VOC	СО	PM ₁₀
CFB Boiler Unit, P-105-90	98.6	49.5	65.6	185.6	27.0
Emergency Power Generator P-51-94	0.52	0.01	0.05	0.11	0.04
Emergency Fire Pump P-52-94	0.14	0.00	0.01	0.03	0.01
Hydrated lime/Sodium Bicarbonate Receiving P-90-89a	NA	NA	NA	NA	0.01
Sand Receiving and Storage P-93-89	NA	NA	NA	NA	0.01
Clay/ Limestone receiving P- 92-89a	NA	NA	NA	NA	0.01
Hydrated lime Storage and Mixing P-50-94	NA	NA	NA	NA	0.03
Fuel Material Receiving and Storage P-61-89a	NA	NA	NA	NA	10.43
Rice Hull Receiving P-34-94	NA	NA	NA	NA	0.04
Flyash Outloading P-91-89a	NA	NA	NA	NA	4.86
Anhydrous Ammonia Storage P-94-89	Negligible emissions				
Cooling Towers P-74-94	NA	NA	NA	NA	0.01
Sand Screening P-31-94a	nd Screening P-31-94a NA NA NA NA 0.50				

Run Date: April 15, 1998

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Reportable Quantities of Other Regulated Air Pollutant Emissions (tons per year)			
Emission Unit Name	HAP Name	Quantity (tons/yr)	Information Source
Facility Wide (Non-Federally Enforceable)	Lead	0.03	California AB 2588 Source test Report
Facility Wide (Non-Federally Enforceable)	HCI	5.20	California AB 2588 Source test Report
Facility Wide (Non-Federally Enforceable)	Formaldehyde	1.07	California AB 2588 Source test Report
Facility Wide (Non-Federally Enforceable)	Total Metals	<0.1	California AB 2588 Source test Report
Facility Wide (Non-Federally Enforceable)	Dioxins	2.17x10 ⁻⁷	California AB 2588 Source test Report
Facility Wide (Non-Federally Enforceable)	Furans	2.17x10 ⁻⁷	California AB 2588 Source test Report
Facility Wide (Non-Federally Enforceable)	PCBs	5.03x10 ⁻⁵	California AB 2588 Source test Report
Facility Wide (Non-Federally Enforceable)	Polyaromatics	0.003	California AB 2588 Source test Report

APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS FACILITY WIDE REQUIREMENTS

RULE 2.3 Ringelmann Chart

Rule Description

This rule specifies the standards for allowable opacity standards for all processes.

Compliance Status

Woodland Biomass currently is in compliance with this rule. There are no outstanding Notices of Correction or Violation.

RULE 2.5 Nuisance

Rule Description

This rule specifies that no source shall create a public nuisance and establishes the standards for determining when a public nuisance has occurred.

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Compliance Status

Woodland Biomass currently is in compliance with this rule. There are no outstanding Notices of Correction or Violation. No complaints with respect to a public nuisance are currently on file with the District.

RULE 2.7 Wet Plumes

Rule Description

This rule specifies the standards for wet plumes from stationary sources and the allowable opacity standards for these processes.

Compliance Status

Woodland Biomass currently is in compliance with this rule. There are no outstanding Notices of Correction or Violation.

RULE 2.11 Particulate Matter

Rule Description

This rule specifies the standards for emissions from particulate matter processes. The purpose of this rule is to limit discharge into the atmosphere, from any source of particulate matter in excess of 0.3 grains per cubic foot of exhaust volume as calculated standard conditions.

Compliance Status

Woodland Biomass currently is in compliance with this rule. Based on annual throughput reports, Biomass is in compliance with their permitted process limits. There are no outstanding Notices of Correction or Violation.

RULE 2.12 Specific Contaminants

Rule Description

This rule specifies the standards for emissions of Sulfur compounds, Carbon Dioxide and particulate matter combustion contaminants from all processes. The purpose of this rule is to the limit the concentration of discharge into the atmosphere, from any source that has the potential to emit Particulate Matter, SO_2 , and CO_2 .

Compliance Status

Woodland Biomass currently is in compliance with this rule. Based on annual throughput reports, Biomass is in compliance with their permitted process limits. There are no outstanding Notices of Correction or Violation.

RULE 2.19 Particulate Matter Process Emission Rates

Rule Description

Woodland Biomass Application #:A-1-96F Page 10 of Page 52 This rule specifies the standards for emissions of particulate matter from all processes.

Compliance Status

Woodland Biomass currently is in compliance with this rule. Based on annual throughput reports, Biomass is in compliance with their permitted process limits. There are no outstanding Notices of Correction or Violation.

RULE 3.1 General Permit Requirements

Rule Description

This rule provides an orderly procedure for the review of new sources of air pollution and of the modification and operation of existing sources through the issuance of permits.

Compliance Status

Woodland Biomass Power, Ltd. has active permits for all emission units which require permits

RULE 3.4 New Source Review

Rule Description

This rule applies to all new stationary sources and emissions units and all modifications to existing stationary sources and emissions units which are subject to Rule 3.1, GENERAL PERMIT REQUIREMENTS, and which, after construction or modification, emit or may emit any affected pollutants. This rule shall not apply to prescribed burning of forest, agriculture or range land, road construction or any other non-point source common to timber harvesting or agricultural practices. The purpose of this rule is to provide for the review of new and modified stationary air pollution sources and to provide mechanisms, including emission offsets, by which authorities to construct such sources may be granted without interfering with the attainment or maintenance of ambient air quality standards.

Compliance Status

Woodland Biomass Power Ltd. has active permits for all emission units which require permits. Woodland Biomass has applied BACT to all emission units which exceeded the BACT trigger level. Woodland Biomass has provided offsets for all emissions over the trigger level.

RULE 3.8 Federal Operating Permits

Rule Description

This Rule implements the requirements of Title V of the Federal Clean Air Act as amended in 1990 (CAA) for permits to operate. Title V provides for the establishment of operating permit programs for sources which emit regulated air pollutants, including attainment and non-attainment pollutants.

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Compliance Status

Woodland Biomass Power Ltd. has submitted a timely and complete Title V application and is currently operating under an application shield.

RULE 5.2 Upset/Breakdown Conditions: Emergency Variance

Rule Description

This rule specifies conditions and procedures for upsets/breakdowns and emergency variances.

Compliance Status

Woodland Biomass Power Ltd. is currently in compliance. However, the facility is aware of this requirement and is prepared to notify the district in the event of an emergency or breakdown situation.

EQUIPMENT SPECIFIC REQUIREMENTS

<u>CIRCULATING FLUIDIZED BED BOILER SYSTEM</u>

NEW SOURCE PERFORMANCE STANDARD, SUBPART Db

Rule Description

- (a) The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 MW (100 million Btu/hour).
- (b) Any affected facility meeting the applicability requirements under paragraph (a) of this section and commencing construction, modification, or reconstruction after June 19, 1984, but on or before June 19, 1986, is subject to the following standards:
 - (4) Oil-fired affected facilities having a heat input capacity greater than 73 MW (250 million Btu/hour) and meeting the applicability requirements under subpart D (Standards of performance for fossil-fuel-fired steam generators; § 60.40) are also subject to the nitrogen oxides standards under this subpart and the particulate matter and sulfur dioxide standards under subpart D (§ 60.42 and § 60.43).(c) Affected facilities which also meet the applicability requirements under subpart J (Standards of performance for petroleum refineries; § 60.104) are subject to the particulate matter and nitrogen oxides standards under this subpart and the sulfur dioxide standards under subpart (d) Affected facilities which also meet the applicability J (§ 60.104). requirements under subpart E (Standards of performance for incinerators; § 60.50) are subject to the nitrogen oxides and particulate matter standards under this subpart. (e) Steam generating units meeting the applicability requirements under subpart Da (Standards of performance for electric utility steam generating units; § 60.40a) are not subject to this subpart. (f) Any

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change to an existing steam generating unit for the sole purpose of combusting gases containing TRS as defined under § 60.281 is not considered a modification under § 60.14 and the steam generating unit is not subject to this subpart. (g) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the following authorities shall be retained by the Administrator and not transferred to a State. (1) Section 60.44b(f). (2) Section 60.44b(g). (3) Section 60.49b(a)(4).

§ 60.43b Standard for particulate matter. (c) On and after the date on which the initial performance test is completed or is required to be completed under § 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts wood, or wood with other fuels, except coal, shall cause to be discharged from that affected facility any gases that contain particulate matter in excess of the following emission limits:(1) 43 ng/J (0.10 lb/million Btu) heat input if the affected facility has an annual capacity factor greater than 30 percent (0.30) for wood. (2) 86 ng/J (0.20 lb/million Btu) heat input if (i) The affected facility has an annual capacity factor of 30 percent (0.30) or less for wood, (ii) Is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) or less for wood, and (iii) Has a maximum heat input capacity of 73 MW (250 million Btu/hour) or less.

- (f) On and after the date on which the initial performance test is completed or is required to be completed under 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, wood, or mixtures of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.
- (g) The particulate matter and opacity standards apply at all times, except during periods of startup, shutdown or malfunction.

[52 FR 47842, Dec. 16, 1987, as amended at 54 FR 51819, Dec. 18, 1989]

Compliance Status

WBPL is currently in compliance with the provisions of 40 CFR 60 Subpart Db. Annual inspections, CEM audits, Relative Accuracy Test Audits, and compliance certifications have verified their compliance status.

RULE 2.16 FUEL BURNING HEAT OR POWER GENERATORS

Rule Description

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This rule applies to non-mobile fuel burning equipment used for heat or power generation. The purpose of this rule is to limit hourly emission rates of SO_2 , NO_2 , and Particulate matter.

Compliance Status

Based on the annual District inspections, throughput reports, and emissions statements, WBPL is in compliance with all conditions of this permit. There are no current NOV's or NOC's.

PERMIT NUMBER: P-105-90, Issued September 10, 1990

Permit Description

This permit is for the circulating fluidized bed boiler system used to produce power. The facility is a 29 MW power production plant. This permit specifies operating conditions for this process. This permit was issued in 1990 and went through the District's NSR rule; therefore, all conditions are federally enforceable. The facility triggered BACT and offseting requirements at the time of construction and has been applying both BACT and Offsets.

Compliance Status

Based on the annual District inspections, throughput reports, and emissions statements, WBPL is in compliance with all conditions of this permit. There are no current NOV's or NOC's.

EMERGENCY POWER GENERATOR.

RULE 2.16 FUEL BURNING HEAT OR POWER GENERATORS

Rule Description

This rule applies to non-mobile fuel burning equipment used for heat or power generation. The purpose of this rule is to limit hourly emission rates of SO_2 , NO_2 , and Particulate matter.

Compliance Status

Based on the annual District inspections, throughput reports, emissions statements, and source test results WBPL is in compliance with all requirements of this rule. There are no current NOV's or NOC's.

RULE 2.32 Stationary Internal Combustion Engines

Rule Description

This Rule applies to any stationary internal combustion engine rated at more than 50 brake horsepower, operated on any gaseous fuel, including liquid petroleum gas (LPG), or diesel fuel. This Rule shall not apply to engines used directly and exclusively for agricultural operations necessary for the growing of crops or the raising of fowl or animals. The purpose of this Rule is to limit the emission of oxides

Woodland Biomass Application #:A-1-96F Page 14 of Page 52 of nitrogen (NO_x) and carbon monoxide (CO) from stationary internal combustion engines. This Rule sets interim Reasonably Achievable Control Technology (RACT) emission limits until the California Air Resources Board publishes a Best Available Retrofit Control Technology (BARCT) determination for this source category. The latest revision of this rule was board approved on 8/10/94; the rule was SIP submitted on 8/12/94; Final EPA SIP approval is pending.

Compliance Status

Section 503: WBPL has a current District permit which documents that the I.C. engine is exempt from this rule and in compliance with Section 503.

PERMIT NUMBER: P-51-94, Issued July 19, 1994

Permit Description

This permit is for the emergency power generator; the permit gives operating conditions for this process. This permit was issued in 1994 and went through the District's NSR rule; therefore, all conditions are federally enforceable.

Compliance Status

Based on the annual District inspections, throughput reports, and emissions statements, WBPL is in compliance with all conditions of this permit. There are no current NOV's or NOC's.

EMERGENCY FIRE PUMP.

RULE 2.16 FUEL BURNING HEAT OR POWER GENERATORS

Rule Description

This rule applies to non-mobile fuel burning equipment used for heat or power generation. The purpose of this rule is to limit hourly emission rates of SO_2 , NO_2 , and Particulate matter.

Compliance Status

Based on the annual District inspections, throughput reports, and emissions statements, WBPL is in compliance with all conditions of this permit. There are no current NOV's or NOC's.

RULE 2.32 Stationary Internal Combustion Engines

Rule Description

This Rule applies to any stationary internal combustion engine rated at more than 50 brake horsepower, operated on any gaseous fuel, including liquid petroleum gas (LPG), or diesel fuel. This Rule shall not apply to engines used directly and exclusively for agricultural operations necessary for the growing of crops or the raising of fowl or animals. The purpose of this Rule is to limit the emission of oxides

Woodland Biomass Application #:A-1-96F Page 15 of Page 52 of nitrogen (NO_x) and carbon monoxide (CO) from stationary internal combustion engines. This Rule sets interim Reasonably Achievable Control Technology (RACT) emission limits until the California Air Resources Board publishes a Best Available Retrofit Control Technology (BARCT) determination for this source category. The latest revision of this rule was board approved on 8/10/94; the rule was SIP submitted on 8/12/94; Final EPA SIP approval is pending.

Compliance Status

Section 503: WBPL has a current District permit which documents that the I.C. engine is exempt from this rule and in compliance with Section 503.

PERMIT NUMBER: P-52-94, Issued July 19, 1994

Permit Description

This permit is for the standby fire pump engine used to power the emergency sprinkler system, the permit gives operating conditions for this process. This permit was issued in 1994 and went through the District's NSR rule; therefore, all conditions are federally enforceable.

Compliance Status

Based on the annual District inspections, throughput reports, and emissions statements, WBPL is in compliance with all conditions of this permit. There are no current NOV's or NOC's.

HYDRATED LIME/SODIUM BICARBONATE RECEIVING AND STORAGE UNIT

PERMIT NUMBER: P-90-89(a), Issued December 8, 1989

Permit Description

This permit is for the hydrated lime/sodium bicarbonate receiving and storage process; the permit gives operating conditions for this process. This permit was issued in 1989 and went through the District's NSR rule; therefore, all conditions are federally enforceable.

Compliance Status

Based on the annual District inspections, throughput reports, and emissions statements, WBPL is in compliance with all conditions of this permit. There are no current NOV's or NOC's.

SAND RECEIVING AND STORAGE

PERMIT NUMBER: P-93-89, Issued December 8, 1989

Permit Description

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This permit is for the sand receiving and storage process; the permit gives operating conditions for this process. This permit was issued in 1989 and went through the District's NSR rule; therefore, all conditions are federally enforceable.

Compliance Status

Based on the annual District inspections, throughput reports, and emissions statements, WBPL is in compliance with all conditions of this permit. There are no current NOV's or NOC's.

CLAY/LIMESTONE RECEIVING AND STORAGE

PERMIT NUMBER:P-92-89a, Issued December 8, 1989

Permit Description

This permit is for the clay and limestone receiving and storage process; the permit gives operating conditions for this process. This permit was issued in 1989 and went through the District's NSR rule; therefore, all conditions are federally enforceable.

Compliance Status

Based on the annual District inspections, throughput reports, and emissions statements, WBPL is in compliance with all conditions of this permit. There are no current NOV's or NOC's.

HYDRATED LIME STORAGE AND MIXING

PERMIT NUMBER: P-50-94, Issued July 15, 1994

Permit Description

This permit is for the hydrated lime storage and mixing process; the permit gives operating conditions for this process. This permit was issued in 1994 and went through the District's NSR rule; therefore, all conditions are federally enforceable.

Compliance Status

Based on the annual District inspections, throughput reports, and emissions statements, WBPL is in compliance with all conditions of this permit. There are no current NOV's or NOC's.

FUEL MATERIAL RECEIVING AND STORAGE

PERMIT NUMBER: P-61-89a, Issued August 15, 1989

Permit Description

This permit is for the fuel material receiving and storage yard; the permit gives operating conditions for this process. This permit was issued in 1989 and went through the District's NSR rule; therefore, all conditions are federally enforceable.

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Compliance Status

Based on the annual District inspections, throughput reports, and emissions statements, WBPL is in compliance with all conditions of this permit. There are no current NOV's or NOC's.

RICE HULL RECEIVING AND STORAGE

PERMIT NUMBER: P-34-94, Issued May 2, 1994

Permit Description

This permit is for the rice hull receiving and storage operation; the permit gives operating conditions for this process. This permit was issued in 1994 and went through the District's NSR rule; therefore, all conditions are federally enforceable.

Compliance Status

Based on the annual District inspections, throughput reports, and emissions statements, WBPL is in compliance with all conditions of this permit. There are no current NOV's or NOC's.

FLYASH OUTLOADING AND TRANSFER

PERMIT NUMBER: P-91-89a, Issued December 8, 1989

Permit Description

This permit is for the flyash outloading and transfer operation; the permit gives operating conditions for this process. This permit was issued in 1989 and went through the District's NSR rule and permitting process; therefore, all conditions are federally enforceable.

Compliance Status

Based on the annual District inspections, throughput reports, and emissions statements, WBPL is in compliance with all conditions of this permit. There are no current NOV's or NOC's.

ANHYDROUS AMMONIA STORAGE AND RECEIVING

PERMIT NUMBER: P-94-89, Issued December 8, 1989

Permit Description

This permit is for the anhydrous ammonia storage tank; the permit gives operating conditions for this process. This permit was issued in 1989 and went through the District's NSR rule; therefore, all conditions are federally enforceable.

Compliance Status

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Based on the annual District inspections, throughput reports, and emissions statements, WBPL is in compliance with all conditions of this permit. There are no current NOV's or NOC's.

COOLING TOWERS

RULE 9.3 Hexavalent Chromium

Rule Description

This rule applies three types of users: Decorative Chrome Plating Operations, Hard Chrome Plating and Chromic Acid Anodizing, and Cooling Towers. This rule provides a control measure to limit chromium emissions from these sources.

Compliance Status

Section c.1 WBPL does not use any chromium compounds in the

treatment of any of their cooling towers.

Section c.1.b WBPL has valid Permits to Operate for the cooling towers.

Section c.2 WBPL is not required by the District to test for chromium

compounds in the cooling water due to the fact that they don't

use chromium as a treatment option.

PERMIT NUMBER: P-74-94, Issued September 30, 1994

Permit Description

This permit is for the cooling towers; the permit gives operating conditions for this process. This permit was issued in 1994 and went through the District's NSR rule; therefore, all conditions are federally enforceable.

Compliance Status

Based on the annual District inspections, throughput reports, and emissions statements, WBPL is in compliance with all conditions of this permit. There are no current NOV's or NOC's.

SAND SCREENING OPERATION

PERMIT NUMBER: P-31-94(a), Issued April 22, 1994

Permit Description

This permit is for the sand screening operation for the bottom of the boiler; the permit gives operating conditions for this process. This permit was issued in 1994 and went through the District's NSR rule; therefore, all conditions are federally enforceable.

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Compliance Status

Based on the annual District inspections, throughput reports, and emissions statements, WBPL is in compliance with all conditions of this permit. There are no current NOV's or NOC's.

GENERAL FACILITY REQUIREMENT CONDITIONS

Rule Citations are based on Yolo-Solano Air Quality Management Rules and Regulations in effect January 15, 1996.

<u>Title V Federal Operating Permit Conditions</u>

- 1. The Title V permit shall expire five years from the date of issuance. Title V permit expiration terminates the stationary source's right to operate unless a timely and complete Title V permit application for renewal has been submitted. (Rule 3.8 §302.15)
- 2. An owner or operator shall pay the appropriate Title V permit fees on schedule. If fees are not paid on schedule, the permit is forfeited. Operation without a permit subjects the source to potential enforcement action by the District and the U.S. EPA pursuant to Section 502(a) of the CAA.(Rule 3.8 §302.16)
- 3. An owner or operator shall submit a standard District application for renewal of the Title V permit, no earlier than 18 months and no later than six months before the expiration date of the current permit to operate. (Rule 3.8 §402.2)
- 4. An owner or operator shall submit a standard District application for each emissions unit affected by a proposed permit revision that qualifies as a significant Title V permit modification. The application shall be submitted after obtaining any required preconstruction permits. Upon request by the APCO, the owner or operator shall submit copies of the latest preconstruction permit for each affected emissions unit. The emissions unit(s) shall not commence operation until the APCO approves the permit revision. (Rule 3.8 § 402.3)
- 5. An owner or operator shall submit a standard District application for each emissions unit affected by the proposed permit revision that qualifies as a minor permit modification. The application shall be submitted after obtaining any required preconstruction permits. The emissions unit(s) shall not commence operation until the APCO approves the permit revision.(Rule 3.8 § 402.4)
- 6. The owner or operator shall include the following in the application for a minor Title V permit modification:
 - A description of the proposed permit revision, any change in emissions, and additional applicable federal requirements that will apply;

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- b. Proposed permit terms and conditions; and
- c. A certification by a responsible official that the permit revision meets criteria for use of minor permit modification procedures and a request that such procedures be used. (Rule 3.8 § 402.4)
- 7. An owner or operator shall supplement any complete application with additional information upon written request of the APCO, within the timeframe specified by the APCO. (Rule 3.8 §403.2a)
- 8. An owner or operator shall promptly provide additional information in writing to the APCO upon discovery of submittal of any inaccurate information as a part of the application or as a supplement thereto, or of any additional relevant facts previously omitted which are needed for accurate analysis of the application. (Rule 3.8 §403.2b)

Compliance

- 9. The permittee shall comply with all Title V permit conditions. (Rule 3.8 §302.11a.)
- 10. The permit does not convey property rights or exclusive privilege of any sort. (Rule 3.8 §302.11b.)
- 11. Non-compliance with any permit condition is grounds for permit termination, revocation and reissuance, modification, enforcement action, or denial of permit renewal. (Rule 3.8 §302.11c.)
- 12. The permittee shall not use the "need to halt or reduce a permitted activity in order to maintain compliance" as a defense for non-compliance with any permit condition. (Rule 3.8 §302.11d.)
- 13. A pending permit action or notification of anticipated non-compliance does not stay any permit condition. (Rule 3.8 §302.11e.)
- 14. Within a reasonable time period, the permittee shall furnish any information requested by the APCO, in writing, for the purpose of determining:
 - a. Compliance with the permit; or
 - b. Whether or not cause exists for a permit or enforcement action. (Rule 3.8 §302.11f.)
- 15. The permittee shall comply with the requirements of Section 405, Rule 3.1, GENERAL PERMIT REQUIREMENTS, and the emergency provisions contained in all applicable federal requirements. (Rule 3.8 §302.12a.)
- 16. Within two weeks of an emergency event, the owner or operator shall submit to the District a properly signed contemporaneous log or other relevant evidence demonstrating that:
 - a. An emergency occurred;

- b. The permittee can identify the cause(s) of the emergency;
- c. The facility was being properly operated at the time of the emergency;
- d. All steps were taken to minimize the emissions resulting from the emergency; and
- e. Within two working days of the emergency event, the permittee provided the District with a description of the emergency and any mitigating or corrective actions taken. (Rule 3.8 §302.12b.)
- 17. In any enforcement proceeding, the permittee has the burden of proof for establishing that an emergency occurred. (Rule 3.8 §302.12c.)
- 18. Right of Entry The Yolo-Solano Air Quality Management District, the Executive Officer of the California Air Resources Board, the EPA Regional Administrator and/or their authorized representatives, upon the presentation of credentials, shall be permitted:
 - a. To enter upon the premises where the emission source is located or in which any records are required to be kept under the terms and conditions of this permit;
 - b. At reasonable times to have access to and copy any records required to be kept under terms and conditions of this permit;
 - c. To inspect any equipment, operation, or method required in this permit; and
 - d. To obtain samples from the emission source or require samples to be taken. (Rule 3.8 § 302.10)
- 19. Severability If any provision, clause, sentence, paragraph, section or part of these conditions for any reason is judged to be unconstitutional or invalid, such judgement shall not affect or invalidate the remainder of these conditions. (Rule 3.8 § 302.13)
- 20. Operation shall not discharge into the atmosphere from any source whatsoever any contaminant, other than uncombined water vapor, for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:
 - a. As dark or darker in shade as that designated as No. 2 (or 40% opacity) on the Ringelmann Chart, as published by the United States Bureau of Mines; or
 - b. Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subdivision (a).(Rule2.3)
- 21. Except as otherwise permitted by law, the permittee shall not release or discharge into the atmosphere, particulate matter in excess of 0.3 grains per cubic foot of exhaust volume as calculated standard conditions.(Rule 2.11,Sip Approved 6/14/98)

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- 22. The permittee shall not discharge into the atmosphere from any single source of emission whatsoever, any one or more of the following contaminants, in any state or combination thereof, in excess of the following concentrations at the point of discharge:
 - a. Sulfur compounds calculated as sulfur dioxide (SO_2) O.2 percent, by volume at standard conditions.
 - b. Particulate Matter Combustion Contaminants: 0.3 grains per cubic foot of gas calculated to 12 percent of carbon dioxide (CO₂) at standard conditions, except during the start of an operation or change in energy source, during the time necessary to bring the combustion process up to operating level. In measuring the combustion contaminants from incinerators used to dispose of combustible refuse by burning, the carbon dioxide (CO₂) produced by combustion of any liquid or gaseous fuels shall be excluded from the calculation to 12 percent of carbon dioxide (CO₂).(Rule 2.12, SIP Approved 5/31/72)
- 23. The permittee shall comply with hourly particulate emission rates based on the hourly material throughput as follows:

PROCESS WEIGHT VS ALLOWABLE EMISSION RATE PER HOUR

Process W	eight Allowable [Lbs/Hr]	<u>Emissi</u>	on Rate [Lbs/Hr]
	and		
Than	Including		
0	400		1
400	800		2
800	1,500	3	
1,500 2,2	00	4	
2,200 2,9	00	5	
2,900 4,1	00	6	
4,100 5,4	00	7	
5,400 7,0	00	8	
7,000 8,5	00	9	
8500	10,000		10
10,000	11,600		11
11600	13,200		12
13,200	14,800		13
14,800	16,400		14
16,400	18,000		15
18,000	19,600		16
19,600	21,300		17
21,300	23,000		18

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23,000	24,700		19
24,700	26,500		20
26,500	28,300		21
28,300	30,000		22
30,000	31,700		23
31,700	33,300		24
33,300	35,000		25
35,000	36,700		26
36,700	38,300		27
38,300	40,000		28
40,000	41,700		29
41,700	43,300		30
43,300	45,000		31
45,000	46,700		32
46,700	48,300		33
48,300	50,000		34
50,000	51,700		35
51,700	53,300		36
53,300	55,000		37
55,000	56,700		38
56,700	58,300		39
58,300			40
(Rule 2.19), SIP Appro	oved 6/14/78)	

Recordkeeping and Reporting Conditions

- 24. Records shall be maintained of all monitoring and support information required by any applicable federal requirement, including:
 - a. Date, place, and time of sampling;
 - b. Operating conditions at the time of sampling;
 - c. Date, place, and method of analysis; and
 - d. Results of the analysis. (Rule 3.8 § 302.6a)
- 25. Records shall be retained for all required monitoring data and support information for a period of at least five years from the date of sample collection, measurement, report, or application. (Rule 3.8 § 302.6b)
- 26. Any deviation from permit requirements, including that attributable to upset conditions (as defined in the permit), shall be promptly reported to the APCO who will determine what constitutes "prompt" reporting in terms of the requirement, degree, and type of deviation likely to occur. (Rule 3.8 § 302.7a)
- 27. A monitoring report shall be submitted at least every six months and shall identify any deviation from permit requirements, including that previously

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- reported to the APCO pursuant to Section 302.7. a of Rule 3.8. Rule 3.8 § 302.7b)
- 28. All reports of deviation from permit requirements shall include the probable cause of the deviation and any preventive or corrective action taken. Rule 3.8 § 302.7c)
- 29. Each monitoring report shall be accompanied by a written statement from the responsible official that certifies the truth, accuracy, and completeness of the report. (Rule 3.8 § 302.7e)
- 30. The responsible official shall submit a compliance certification to the U.S. EPA and the APCO every 12 months unless required more frequently by an applicable requirement. (Rule 3.8 § 302.14a)
- 31. The compliance certification shall identify the basis for each permit term or condition (e.g., specify the emissions limitation, standard, or work practice) and a means of monitoring compliance with the term or condition consistent with Sections 302.5, 302.6, and 302.7 of Rule 3.8 (Rule 3.8 § 302.14b)
- 32. The compliance certification shall include a statement of the compliance status, whether compliance was continuous or intermittent, and method(s) used to determine compliance for the current time period and over the entire reporting period. (Rule 3.8 § 302.14c)
- 33. The compliance certification shall include any additional inspection, monitoring, or entry requirement that may be promulgated pursuant to Sections 114(a) and 504(b) of the Federal Clean Air Act. (Rule 3.8 § 302.14d)

Facility Wide Operating Permit Conditions

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Conditions 34 to 43 are federally enforceable for all permitted units because all permits went through the NSR permitting process. The legal authority to make these conditions federally enforceable comes from the following NSR permits:P-105-90, Issued September 10, 1990, P-51-94, Issued July 19, 1994, P-52-94, Issued July 19, 1994, P-90-89(a), Issued December 8, 1989, P-91-89(a), Issued December 8, 1989, P-93-89, Issued December 8, 1989, P-94-89, Issued December 8, 1989, P-94-89, Issued December 8, 1989,

- 34. Operation shall be conducted in compliance with all data and specifications submitted with the application under which the permit is issued.(NSR permits)
- 35. The Permit to Operate and a copy of these conditions shall be posted on site, clearly visible and readily available upon request. (NSR permits)

- 36. No modifications to the process, types or quantities of materials used, and operating schedule, as presented with the Permit to Operate application, shall be made without prior District approval.(NSR permits)
- 37. All persons involved with the operation and maintenance activities of the permitted process shall be made aware of these conditions and abide by them accordingly.(NSR permits)
- 38. The equipment associated with the approved process shall be properly maintained and kept in good operating condition to ensure compliance and to prevent exceeding the permitted emission limits at all times except during times of repair or breakdown.(NSR permit)
- 39. Malfunction The Yolo-Solano Air Quality Management District shall be notified of any breakdown of the emissions-monitoring equipment, any equipment, or any process that results in an increase in emissions above the allowable emission limits stated as a condition of this permit or any applicable state or federal regulation that affects the ability for the emissions to be accurately determined. Such breakdowns shall be reported to the District in accordance with the procedures and reporting times specified in District Rule 3.1 Section 405.3 Breakdown Conditions.(NSR permits)
- 40. In the event that any of the equipment is found to be in violation of District Rules and Regulations, the Source shall be liable for violations up to the maximum allowed by law. The penalties are accrued on a daily basis.(NSR permits)
- 41. Non-compliance with any permit condition is grounds for permit termination, enforcement action, or denial of permit renewal.(NSR permits)
- 42. The District may suspend the permit if, within a reasonable time, the Source willfully fails or refuses to furnish requested information, analyses, plans or specifications relating to emissions from the source for which the permit was issued.(NSR permits)
- 43. The Source shall comply with all applicable air pollution control laws. (NSR permits)

<u>Title VI Provisions</u>

- The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR part 82, Subpart E:
 - A. All containers containing a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required

- warning statement if it is being introduced into interstate commerce pursuant to §82.106.
- B. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
- C. The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
- D. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 45. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR part 82, Subpart F, except as provided for MVACs in Subpart B:
 - A. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - B. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - C. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - D. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like appliance" as defined at §82.152)
 - E. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
 - F. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 46. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 47. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in

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Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

48. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program.

EQUIPMENT OR EMISSION UNIT SPECIFIC CONDITIONS

CIRCULATING FLUIDIZED BED BOILER SYSTEM

Federally Enforceable Requirement Conditions

- -New Source Performance Standard, Subpart Db-
- 49. Particulate matter emissions shall not exceed 0.01lb per million Btu (NSPS Subpart Db, 40 CFR 60.43b (c)(i)).
- 50. Opacity shall not exceed 20 percent based on a six minute average except for one six minute period per hour when opacity shall not exceed 27%. (NSPS Subpart Db, 40 CFR 60.43b (f)).
- 51. The particulate matter and opacity limits apply at all times except periods of start up, shutdown, or malfunction.(NSPS Subpart Db, 40 CFR 60.43b (g)).
- 52. WBPL shall continuously monitor opacity emissions.(NSPS Subpart Db, 40 CFR 60.48b (a)).
- 53. WBPL shall maintain records of opacity.(NSPS Subpart Db, 40 CFR 60.49b (f)).
- 54. WBPL shall submit excess emissions reports for any exceedance of the NOx or opacity standards for any calendar quarter during which there are excess emissions. WBPL shall report semiannually if there are no excess emissions (NSPS Subpart Db, 40 CFR 60.49b (h)).
- 55. SO_2 emissions shall not exceed 1.2 lb. per million Btu for units with an annual capacity factor for petroleum coke of less than or equal to 30 percent. (NSPS Subpart Db, 40 CFR 60.42b (d)(1)).
- 56. WBPL shall continuously monitor SO₂ emissions using continuous emissions monitors. (NSPS Subpart Db, 40 CFR 60.47b (a)).

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- 57. A 30 day performance test shall be performed for SO₂ 30 days after initiation of use of pet coke at max heat input, but no later than 180 days after the start of use. (NSPS Subpart Db, 40 CFR 60.45b (c)(1)).
- 58. Compliance with the SO_2 standard shall be determined using a 30 day rolling average during the calendar year petroleum coke is used . (NSPS Subpart Db, 40 CFR 60.45b (g)).
- 59. WBPL shall maintain records of all pet coke usage, including times of operation and quantity. (NSPS Subpart Db, 40 CFR 60.49b (d)).
- 60. WBPL shall submit reports to EPA on SO₂ emissions during the calendar year pet coke is used.(NSPS Subpart Db, 40 CFR 60.49b (j),(k)).
- 61. NO_x emissions shall not exceed 0.3 lb. per million Btu.(NSPS Subpart Db, 40 CFR 60.44b (d)).
- 62. Compliance with the NO_x emission standard shall be determined using a thirty day rolling average. (NSPS Subpart Db, 40 CFR 60.46b (e),(3))
- 63. WBPL shall continuously monitor NO_x emissions using continuous emissions monitors.(NSPS Subpart Db, 40 CFR 60.48b (d)).
- 64. Facility subject to NOx standards shall maintain <u>records</u> of the following information for each steam generating unit operating day:
 - A. calendar date,

- B. average hourly NOx emission rate,
- C. 30-day average NOx emission rate,
- D. identification of days when 30-day average NOx emission rate exceed the standard,
- E. identification of days for which data was not collected,
- F. identification of days that have been excluded from the average and the reason,
- G. identification of "F" factor used in calculations, method of determination and fuel type,
- H. identification of time when pollutant concentration exceeded full span of CFMS.
- I. description of modifications to CEMS, and
- J. results of daily CEM drift test and quarterly accuracy assessments. (NSPS Subpart Db, 40 CFR 60.49b (g))
- WBPL shall submit a quarterly report containing the information recorded under 40 CFR 60.49b (g). (NSPS Subpart Db, 40 CFR 60.49b (i))
- 66. WBPL shall not build, expand, or operate any non-mobile fuel burning equipment for a heat or power generator unit unless the discharge into the atmosphere of

contaminants will not and does not exceed any one or more of the following rates:

- A. 200 pounds per hour of sulfur compounds, calculated as sulfur dioxide (SO₂);
- B. 140 pounds per hour of nitrogen oxides, calculated as nitrogen dioxide (NO₂);
- C. 40 pounds per hour of combustion particulate derived from the fuel. (Rule 2.16, SIP Approved 1/29/79)
- -Operational Requirements-

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- 67. Process amounts limited by permitted emission limits.
 Operating schedule: 24 hours/day, 7 days/week, 8400 hours/year.(NSR permit P-105-90, Issued September 10, 1990)
- 68. All emission determinations shall be made in the as-found operating condition. No compliance determination shall be established within two hours after a continuous period in which fuel flow to the unit is zero, or shut off, for thirty minutes or longer.(NSR permit P-105-90, Issued September 10, 1990)
- 69. The normal start-up period for the Circulating Fluidized Bed Boiler(CFB) shall not exceed 36 hours. The start-up period is defined as the time when supplementary fuel is first introduced to the CFB to the time when the combustion temperature reaches 1250°F as measured by the Flue gas temperature gauge. (NSR permit P-105-90, Issued September 10, 1990)
- 70. During start-up procedures, supplementary fuel shall be used to preheat the combustion zone to 750°F as measured by the Flue gas temperature gauge. (NSR permit P-105-90, Issued September 10, 1990)
- 71. During start-up procedures, biomass fuel may be incorporated once the combustion zone temperature reading reaches 750°F as measured by the Flue gas temperature gauge. (NSR permit P-105-90, Issued September 10, 1990)
- 72. During normal shut-down procedures, supplementary fuel shall be used once the combustion temperature drops below 750°F. A normal shut-down period shall not exceed 24 hours. Shut-downs not considered normal shall be guided by industry safety standards. (NSR permit P-105-90, Issued September 10, 1990)
- 73. When curing of refractory is required after CFB and/or electrical generation and ancillary equipment repair or modification, an extended start-up time is permitted. The extended start-up time shall not exceed 60 hours unless manufacturers specifications and safety standards require a longer start-up time. (NSR permit P-105-90, Issued September 10, 1990)

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- 74. WBPL shall notify the District in writing prior to normal start-up and shut-down. When extended start-up is required WBPL shall document the reason for the extended start-up and provide manufacturer documentation if extended start-up will exceed 60 hours. (NSR permit P-105-90, Issued September 10, 1990)
- 75. With the exception of start-up and normal shut-down procedures, emissions shall not exceed the permitted emission limits and the combustion temperatures shall be maintained in the range between 1250°-1800°F during the combustion of biomass fuel.(NSR permit P-105-90, Issued September 10, 1990)
- 76. Natural gas shall be the only supplementary fuel. The use of natural gas shall be limited to 250 MMBTU/HR. Offset credits shall be used for any emissions generated by the combustion of natural gas.(NSR permit P-105-90, Issued September 10, 1990)
- 77. WBPL shall operate the fluidized bed combustion system in a manner which does not exceed the following maximum exhaust stack emissions as determined by the average value of three one hour source tests and based upon rated heat input of 450 MMBTU/HR:

 SO_x as SO_2 0.04 lb/MMBTU and 13.2 lb/hr (40 CFR 60 Appendix A, Method 5/8);

NO_x as NO₂ 0.08 lb/MMBTU and 26.3 lb/hr (CARB Method 100);

CO 0.15 lb/MMBTU and 49.5 lb/hr (CARB Method 100);

HC/VOC 0.05 lb/MMBTU and 17.5 lb/hr (40 CFR 60 Appendix A, Method 18);

TSP 0.007 gr/dscf referenced to 12 % CO₂ and

5.0 lb/hr by EPA M-5 "front end" and

0.01 gr/dscf referenced to 12% CO₂ and

7.2 lb/hr total by EPA M-5 "front end

and backend samples;

NH₃ slip not to exceed 50 ppm (BAAQMD Method ST-1B.

(NSR permit P-105-90, Issued September 10, 1990)

- 78. Annual source testing shall be conducted for SO_{x} , NO_{x} , CO, CO_{2} , NH_{3} , HC/VOC and TSP. A source test protocol including the use of a typical fuel mixture and methods shall be submitted to the District and approved by the APCO. (NSR permit P-105-90, Issued September 10, 1990)
- 79. Offset fuel loading may be reduced to correspond to a reduction in firing rates or fuels usage. (NSR permit P-105-90, Issued September 10, 1990)
- 80. WBPL shall comply with all requirements of 40 CFR 60 for New Source Performance Standards (NSPS) as applicable under Subparts A & Db.
- 81. Biomass fuels shall be limited to:

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- a. Sawmill residue;
- b. Forest residue:
- c. Urban wood *:
- d. Agricultural residues**; and
- e. Petroleum gas;
- * Urban wood is defined as clean, chipped biomass material derived from construction and demolition materials, pallets, crates, boxes, and tree trimmings.
- ** Agricultural residues shall be defined as organic plant based material generated by agricultural operations. Agricultural residues include but are not limited to: grasses, reject seed, corn cobs, Orchard and vineyard prunings; Orchard Removal; Prune, peach and olive pits; Coffee beans; Cocoa beans; Almond shells and hulls; Walnut shells; and Rice hulls. (NSR permit P-105-90, Issued September 10, 1990)
- WBPL shall obtain District approval for test burns of biomass materials other than those specified as Biomass fuels in the condition above. Results of such tests shall be submitted to the District for review and evaluation.(NSR permit P-105-90, Issued September 10, 1990)
- 83. Biomass fuel shall not contain pressure treated wood. The urban wood waste shall not contain compounds listed in CCR 66261.24 (a) (2) (A) in amounts exceeding the TTLC values.(NSR permit P-105-90, Issued September 10, 1990)
- A gauge shall be maintained to indicate the static pressure differential across the baghouse bags. (NSR permit P-105-90, Issued September 10, 1990)
- 85. The baghouse bags shall be cleaned before the pressure differential reaches the critical pressure. (NSR permit P-105-90, Issued September 10, 1990)

Continuous Emissions Monitoring Requirements

- 86. WBPL shall operate and maintain the following continuous emission monitors (CEMS):O₂, CO, SO₂, NO_x, Opacity, and Volumetric Flow. (NSR permit P-105-90, Issued September 10, 1990)
- 87. A quality assurance/quality control (QC) program for the CEM system shall be developed and maintained. As a minimum, the QC program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:
 - a. Calibrations of CEMS;
 - b. Calibration Drift (CD) determination and adjustment of CEMS;
 - c. Preventive Maintenance of CEMS (including spare parts inventory):
 - d. Data recording, calculations, and reporting procedures;

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- e. Accuracy audit procedures including sampling and analysis methods; and
- f. Program for corrective action for malfunctioning CEMS. (NSR permit P-105-90, Issued September 10, 1990)
- 88. All in-stack monitoring devices shall be routinely maintained for continuous on-line service in accordance with 40 CFR Part 60, Appendix B and F. (NSR permit P-105-90, Issued September 10, 1990)
- 89. Daily calibration and span checks shall be performed. Adjustments shall be made if the drift is greater than specified in 40 CFR Part 60 Appendix B, specification 2 (NO_x and SO_x), specification 3 (O_2), and specification 4 (CO).(NSR permit P-105-90, Issued September 10, 1990)
- 90. All gas cylinders used for daily calibration and span checks shall have a current, valid certification of concentration by the manufacturer.(NSR permit P-105-90, Issued September 10, 1990)
- 91. A Relative Accuracy Test Audit (RATA) shall be conducted at least once every four calendar quarters. The RATA for NO_x and SO₂ monitors shall be conducted in accordance with 40 CFR Part 60 Appendix B, performance specification 2, section 7. The RATA for O₂ monitors shall be conducted in accordance with 40 CFR Part 60 Appendix B, performance specification 3, section 3. The RATA for CO monitors shall be conducted in accordance with 40 CFR Part 60 Appendix B, performance specification 4, section 3. (NSR permit P-105-90, Issued September 10, 1990)
- 92. A Cylinder Gas Audit (CGA) shall be conducted in three of four calendar quarters, but in no more than three quarters in succession. The CGA shall be conducted in accordance with 40 CFR Part 60 Appendix F, Section 5.1.2 (NSR permit P-105-90, Issued September 10, 1990)

Record Keeping Requirements

- 93. WBPL shall maintain daily records of the following:
 - a. Operating date and time (including the duration of start-up, shut-down, and total hours of operation;
 - b. Firing rate;
 - c. Quantity of fuel used in the Circulating Fluidized Bed Boiler (CFB); and
 - d. All records from the continuous monitoring system including, but not limited to emissions, calibration information, and downtime.

(NSR permit P-105-90, Issued September 10, 1990)

- 94. Records shall be kept to verify the following:
 - a. The specific times of combustion of biomass fuels in the Circulating Fluidized Bed Boiler (CFB);

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- b. The specific times and duration of the supplementary fuel combustion; and
- c. Equipment breakdowns or malfunctions. (NSR permit P-105-90, Issued September 10, 1990)
- 95. Records shall be kept of any emissions in excess of the permitted emissions section as recorded by the CEM or annual source test data. (NSR permit P-105-90, Issued September 10, 1990)
- 96. Records of urban wood material deliveries shall be kept and shall include the place of origin and process from which the urban wood was generated.(NSR permit P-105-90, Issued September 10, 1990)
- 97. WBPL shall maintain a complete central file containing all measurements records and other data that are required to be collected pursuant to the various provisions of this Permit to Operate. This file shall include but is not limited to:
 - a. The data collected from in-stack monitoring instruments;
 - b. The records on fuel input rate;
 - c. The amount of supplemental fuel burned;
 - d. The results of all source tests or performance tests; and
 - e. All other air pollution system performance evaluations and records of calibration checks, adjustments and maintenance performed on all equipment which is subject to this Permit to Operate.

(NSR permit P-105-90, Issued September 10, 1990)

Reporting Requirements

- 98.. Emissions in excess of the permitted emissions section are considered violations and shall be reported to the District in accordance with District Rule 3.1, Section 405.3. Such violations shall be subject to the appropriate enforcement action.(NSR permit P-105-90, Issued September 10, 1990)
- 99. WBPL shall provide the District with a monthly report of WBPL's CEMS to verify that the CEMS comply with CEM maintenance requirements (NSR permit P-105-90, Issued September 10, 1990)
- 100. An annual throughput/production report shall be submitted at the end of each calendar year. This report shall include operating hours and the amounts of materials processed. Each type of material and each type of process shall be listed separately. This report shall be submitted no later than March 31 for the previous calendar year.(NSR permit P-105-90, Issued September 10, 1990)
- 101. WBPL shall provide an annual emission statement showing the actual emissions of TSP and VOC (as determined by an annual source test). In addition, the emissions of NO_x , CO, and SO_x (as derived by CEM data), including any data deemed necessary by the District to document the emissions shall be submitted. The

Woodland Biomass Application #:A-1-96F Page 34 of Page 52 statement shall contain a certification by a responsible company officer that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement (per District Rule 3.7). This emissions statement shall be submitted to the District no later than March 31, for the previous calendar year. (NSR permit P-105-90, Issued September 10, 1990)

102. Source testing reports shall be submitted on each unit for each fuel burned, to the District within thirty days of the source testing date. (NSR permit P-105-90, Issued September 10, 1990)

Mitigation and Offset Requirements

- 103. WBPL shall demonstrate on a continuous basis that there is a suitable mix of biomass to satisfy TSP offset requirements. Complete records will be kept, including but not limited to, planned deliveries of biomass materials, source of biomass materials for the next two weeks of operation and actual use of biomass materials during the previous week. (NSR permit P-105-90, Issued September 10, 1990)
- 104. WBPL will make all possible effort to obtain biomass inventories including offset materials from open field burning in the following priorities:
 - 1.) within 15 miles of the facility;
 - 2.) within the Yolo-Solano AQMD; and
 - 3.) from counties within the Sacramento Air Basin.

(NSR permit P-105-90, Issued September 10, 1990)

Non-federally Enforceable Requirement Conditions (District Enforceable Only)

-Air Toxics Conditions

105. The equipment listed on this permit is subject to Division 26, Part 6, Chapter 1, Section 44300 of the California Health and Safety Code (Air Toxics "Hot Spots" Information and Assessment Act of 1987). WBPL is responsible for meeting all requirements and deadlines set forth in the legislation.

EMERGENCY POWER GENERATOR.

Federally Enforceable Requirement Conditions

- 106. WBPL shall not build, expand, or operate the emergency power generator unit unless the discharge into the atmosphere of contaminants will not and does not exceed any one or more of the following rates:
 - a. 200 pounds per hour of sulfur compounds, calculated as sulfur dioxide (SO₂);

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- b. 140 pounds per hour of nitrogen oxides, calculated as nitrogen dioxide (NO₂);
- c. 40 pounds per hour of combustion particulate derived from the fuel. (Rule 2.16, SIP Approved 1/29/79)
- 107. Maximum diesel fuel consumption rate: 40.43 gallons/day and 2205 gallons/year maximum. (P-51-94, Issued July 19, 1994)
- 108. Operating Schedule for normal maintenance and testing: 55 minutes/day, 1 day/week,52 weeks/year, not to exceed 50 hours per year.(P-51-94, Issued July 19, 1994)
- 109. Operating Schedule for emergency situations: The emergency standby engine may be operated 24 hours/day only for the duration of the emergency situation.(P-51-94, Issued July 19, 1994)
- 110. An annual throughput/production report shall be submitted at the end of each calendar year. This report is due no later than March 31 for the previous year. This report must include actual operating hours and actual amounts of materials processed (for materials that have process limits listed on the Permit to Operate). Each type of material and each type of process must be listed separately.(P-51-94, Issued July 19, 1994)
- 111. The emergency standby engine shall only be used when normal power line or natural gas service fails; or for the emergency pumping of water for either fire protection or flood relief. The emergency standby engine may not be operated to supplement a primary power source when the load capacity or rating of the primary power source has either been reached or exceeded.(P-51-94, Issued July 19, 1994)

<u>District Enforceable Conditions Pending Federal Enforceability</u>

(The following conditions are currently District enforceable. They will become immediately Federally enforceable upon promulgation of SIP approval by EPA)

- 112. To remain exempt under Rule 2.32 the emergency standby engine shall be maintained and tested for no more than 50 hours per calendar year. (Rule 2.32 § 110.3, Adopted 8/10/94)
- 113. Any owner or operator claiming an exemption under Section 110 of District rule 2.32 shall submit support documentation identifying reasons for the exemption. Such documentation shall contain a list that provides the following for each engine:
 - a. Permit to Operate number;
 - b. Engine manufacturer;
 - c. Model designation;
 - d. Rated brake horsepower;

- e. Type of fuel and type of ignition. (Rule 2.32 § 503.1, Adopted 8/10/94)
- 114. The owner or operator shall maintain a log of operating hours for each engine. (Rule 2.32 § 503.2, Adopted 8/10/94)
- 115. The operating log shall be available to the Air Pollution Control Officer upon request. (Rule 2.32 § 503.3, Adopted 8/10/94)

EMERGENCY FIRE PUMP.

Federally Enforceable Requirement Conditions

- 116. WBPL shall not build, expand, or operate any non-mobile fuel burning equipment for a heat or power generator unit unless the discharge into the atmosphere of contaminants will not and does not exceed any one or more of the following rates:
 - a. 200 pounds per hour of sulfur compounds, calculated as sulfur dioxide (SO₂);
 - b. 140 pounds per hour of nitrogen oxides, calculated as nitrogen dioxide (NO₂);
 - c. 40 pounds per hour of combustion particulate derived from the fuel. (Rule 2.16, SIP Approved 1/29/79)
- 117. Maximum diesel fuel consumption rate: 11.28 gallons/day and 615 gallons/year maximum.(P-52-94, Issued July 19, 1994)
- 118. Operating Schedule for normal maintenance and testing: 55 minutes/day, 1 day/week, 52 weeks/year, not to exceed 50 hours per year. (P-52-94, Issued July 19, 1994)
- 119. Operating Schedule for emergency situations: During an extended power failure, the engine may be operated 24 hours/day. Operation shall be limited to actual interruptions of electrical power by the serving utility, but not to exceed 200 hours/year. (P-52-94, Issued July 19, 1994)
- 120. An annual throughput/production report shall be submitted at the end of each calendar year. This report is due no later than March 31 for the previous year. This report must include actual operating hours and actual amounts of materials processed (for materials that have process limits listed on the Permit to Operate). Each type of material and each type of process must be listed separately.(P-52-94, Issued July 19, 1994)
- 121. The emergency standby engine shall only be used when normal power line or natural gas service fails; or for the emergency pumping of water for either fire protection or flood relief. The emergency standby engine may not be operated to supplement a primary power source when the load capacity or rating of the primary

Woodland Biomass Application #:A-1-96F Page 37 of Page 52 power source has either been reached or exceeded. (P-52-94, Issued July 19, 1994)

<u>District Enforceable Conditions Pending Federal Enforceability</u>

(The following conditions are currently District enforceable. They will become immediately Federally enforceable upon promulgation of SIP approval by EPA)

- 122. To remain exempt under Rule 2.32 the emergency standby engine shall be maintained and tested for no more than 50 hours per calendar year. (Rule 2.32 § 110.3, Adopted 8/10/94)
- 123. Any owner or operator claiming an exemption under Section 110 of District rule 2.32 shall submit support documentation identifying reasons for the exemption. Such documentation shall contain a list that provides the following for each engine:
 - a. Permit to Operate number;
 - b. Engine manufacturer;
 - c. Model designation;
 - d. Rated brake horsepower;
 - e. Type of fuel and type of ignition. (Rule 2.32 § 503.1, Adopted 8/10/94)
- 124. The owner or operator shall maintain a log of operating hours for each engine. (Rule 2.32 § 503.2, Adopted 8/10/94)
- 125. The operating log shall be available to the Air Pollution Control Officer upon request. (Rule 2.32 § 503.3, Adopted 8/10/94)

HYDRATED LIME/SODIUM BICARBONATE RECEIVING AND STORAGE UNIT

Federally Enforceable Requirement Conditions

- -Equipment Operating Conditions-
- 126. Permitted Process Limits include the following:

SandDailyYearlySilo fill rate25 tons200 tonsLime injection to2 tons200 tonsbaghouse .(P-90-89(a), Issued December 8, 1989)

- 127. Operating schedule: 24 hours/day, 7 days/week, 52 weeks/year. P-90-89(a), Issued December 8, 1989)
- 128. No visible emissions beyond property boundaries are permitted.(P-90-89(a), Issued December 8, 1989)

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- -Mitigation and Offsets-
- 129. Woodland Biomass Power Ltd. shall demonstrate on a continuous basis that there is a suitable mix of biomass to satisfy offset requirements. Complete records will be kept, including but not limited to, planned deliveries of biomass materials, source of biomass materials for the next two weeks of operation and actual use of biomass materials during the previous week. (P-90-89(a), Issued December 8, 1989)
- 130. Woodland Biomass Power Ltd. will make all possible effort to obtain biomass inventories including offset materials from open field burning in the following priorities:
 - a) Firstly within 15 miles of the facility.
 - b) Secondly within the Yolo-Solano AQMD.
 - c) Thirdly from counties within the Sacramento Air Basin.(P-90-89(a), Issued December 8, 1989)
 - -Monitoring, Record Keeping and Reporting
- 131. The operator shall maintain daily records of the following:
 - a. Operating date and time.
 - b. Quantity of all materials received and stored.(P-90-89(a), Issued December 8, 1989)
- 132. Any changes in operating schedule shall be reported to the District immediately.(P-90-89(a), Issued December 8, 1989)
- 133. Woodland Biomass Power Ltd. shall maintain a complete central file containing all measurements records and other data that are required to be collected pursuant to the various provisions of this permit accessible to District representatives. (P-90-89(a), Issued December 8, 1989)
- 134. An annual throughput/production report shall be submitted at the end of each calendar year. This report is due no later than March 31, for the previous year. This report must include operating hours, and amounts of materials processed. Each type of material and each type of process must be listed separately.(P-90-89(a), Issued December 8, 1989)
 - -Air Toxics Conditions-
- 135. The equipment listed on this permit is subject to Division 26, Part 6, Chapter 1, Section 44300 of the California Health and Safety Code (Air Toxics "Hot Spots" Information and Assessment Act of 1987). Woodland Biomass Power Ltd. is responsible for meeting all requirements and deadlines set forth in the legislation.

Woodland Biomass Application #:A-1-96F Page 39 of Page 52 136. The District reserves the right to require Woodland Biomass Power Ltd. to reevaluate the health risk, if there is a significant change in population, emissions or new health data becomes available.

SAND RECEIVING AND STORAGE

<u>Federally Enforceable Requirement Conditions</u>

- -Operational Requirements-
- 137. Permitted Process Limits include the following:

Sand Daily Yearly
Silo fill rate, 240 tons 2800 tons

Batch feed to

boiler (P-93-89, Issued December 8, 1989)

- 138. Operating schedule: 24 hours/day, 7 days/week, 365 days/year. (P-93-89, Issued December 8, 1989)
- 139. No visible emissions beyond property boundaries are permitted.(P-93-89, Issued December 8, 1989)
 - -Mitigation and Offsets-
- 140. Woodland Biomass Power Ltd. shall demonstrate on a continuous basis that there is a suitable mix of biomass to satisfy offset requirements. Complete records will be kept, including but not limited to, planned deliveries of biomass materials, source of biomass materials for the next two weeks of operation and actual use of biomass materials during the previous week.(P-93-89, Issued December 8, 1989)
- 141. Woodland Biomass Power Ltd. will make all possible effort to obtain biomass inventories including offset materials from open field burning in the following priorities:
 - a) Firstly within 15 miles of the facility.
 - b) Secondly within the Yolo-Solano AQMD.
 - c) Thirdly from counties within the Sacramento Air Basin.(P-93-89, Issued December 8, 1989)
 - -Monitoring, Record Keeping and Reporting
- 142. The operator shall maintain daily records of the following:
 - a. Operating date and time.

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b. Quantity of all materials received and stored. (P-93-89, Issued December 8, 1989)

- 143. Any changes in operating schedule shall be reported to the District immediately.(P-93-89, Issued December 8, 1989)
- 144. Woodland Biomass Power Ltd. shall maintain a complete central file containing all measurements records and other data that are required to be collected pursuant to the various provisions of this permit accessible to District representatives.(P-93-89, Issued December 8, 1989)
- 145. An annual throughput/production report shall be submitted at the end of each calendar year. This report is due no later than March 31, for the previous year. This report must include operating hours, and amounts of materials processed. Each type of material and each type of process must be listed separately.(P-93-89, Issued December 8, 1989)
 - -Air Toxics Conditions-
- 146. The equipment listed on this permit is subject to Division 26, Part 6, Chapter 1, Section 44300 of the California Health and Safety Code (Air Toxics "Hot Spots" Information and Assessment Act of 1987). Woodland Biomass Power Ltd. is responsible for meeting all requirements and deadlines set forth in the legislation.(P-93-89, Issued December 8, 1989)
- 147. The District reserves the right to require Woodland Biomass Power Ltd. to reevaluate the health risk, if there is a significant change in population, emissions or new health data becomes available. (P-93-89, Issued December 8, 1989)

CLAY/LIMESTONE RECEIVING AND STORAGE

Federally Enforceable Requirement Conditions

-Operational Requirements-

148. Permitted Process Limits include the following:

<u>Clay/Limestone</u> <u>Daily</u> <u>Yearly</u> Handling 240 tons 1800 tons

(P-92-89a, Issued December 8, 1989)

- 149. Operating schedule: 24 hours/day, 7 days/week, 365 days/year.(P-92-89a, Issued December 8, 1989)
- 150. No visible emissions beyond property boundaries are permitted. (P-92-89a, Issued December 8, 1989)
 - -Mitigation and Offsets-

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- 151. Woodland Biomass Power Ltd. shall demonstrate on a continuous basis that there is a suitable mix of biomass to satisfy offset requirements. Complete records will be kept, including but not limited to, planned deliveries of biomass materials, source of biomass materials for the next two weeks of operation and actual use of biomass materials during the previous week.(P-92-89a, Issued December 8, 1989)
- 152. Woodland Biomass Power Ltd. will make all possible effort to obtain biomass inventories including offset materials from open field burning in the following priorities:
 - a) Firstly within 15 miles of the facility.
 - b) Secondly within the Yolo-Solano AQMD.
 - c) Thirdly from counties within the Sacramento Air Basin. (P-92-89a, Issued December 8, 1989)
 - -Monitoring, Record Keeping and Reporting
- 153. The operator shall maintain daily records of the following:
 - a. Operating date and time.
 - b. Quantity of all materials received and stored. (P-92-89a, Issued December 8, 1989)
- 154. Any changes in operating schedule shall be reported to the District immediately.(P-92-89a, Issued December 8, 1989)
- 155. Woodland Biomass Power Ltd. shall maintain a complete central file containing all measurements records and other data that are required to be collected pursuant to the various provisions of this permit accessible to District representatives. (P-92-89a, Issued December 8, 1989)
- 156. An annual throughput/production report shall be submitted at the end of each calendar year. This report is due no later than March 31, for the previous year. This report must include operating hours, and amounts of materials processed. Each type of material and each type of process must be listed separately.(P-92-89a, Issued December 8, 1989)
 - -Air Toxics Conditions-
- 157. The equipment listed on this permit is subject to Division 26, Part 6, Chapter 1, Section 44300 of the California Health and Safety Code (Air Toxics "Hot Spots" Information and Assessment Act of 1987). Woodland Biomass Power Ltd. is responsible for meeting all requirements and deadlines set forth in the legislation.(P-92-89a, Issued December 8, 1989)
- 158. The District reserves the right to require Woodland Biomass Power Ltd. to reevaluate the health risk, if there is a significant change in population, emissions or new health data becomes available. (P-92-89a, Issued December 8, 1989)

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HYDRATED LIME STORAGE AND MIXING

Federally Enforceable Requirement Conditions

- -Operational Requirements-
- 159. Permitted Process Limits include the following:

<u>Daily</u> <u>Yearly</u>

Lime Loading 350 tons 350 tons Lime Blending 1 tons 350 tons

- (P-50-94, Issued July 15, 1994)
- 160. Operating Schedule: 24 hours/day, 7 days/week, 52 weeks/year.(P-50-94, Issued July 15, 1994)
- 161. No visible emissions beyond property boundaries are permitted. (P-50-94, Issued July 15, 1994)
 - -Mitigation and Offsets-
- 162. Woodland Biomass Power Ltd. shall demonstrate on a continuous basis that there is a suitable mix of biomass to satisfy offset requirements. Complete records will be kept, including but not limited to, planned deliveries of biomass materials, source of biomass materials for the next two weeks of operation and actual use of biomass materials during the previous week. (P-50-94, Issued July 15, 1994)
- 163. Woodland Biomass Power Ltd. will make all possible effort to obtain biomass inventories including offset materials from open field burning in the following priorities:
 - a) Firstly within 15 miles of the facility.
 - b) Secondly within the Yolo-Solano AQMD.
 - c) Thirdly from counties within the Sacramento Air Basin.(P-50-94, Issued July 15, 1994)
 - -Monitoring, Record Keeping and Reporting
- 164. The operator shall maintain daily records of the following:
 - a. Operating date and time.
 - b. Quantity of all materials received and stored.(P-50-94, Issued July 15, 1994)
- 165. Any changes in operating schedule shall be reported to the District immediately.(P-50-94, Issued July 15, 1994)
- 166. Woodland Biomass Power Ltd. shall maintain a complete central file containing all measurements records and other data that are required to be collected pursuant to

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- the various provisions of this permit accessible to District representatives. (P-50-94, Issued July 15, 1994)
- 167. An annual throughput/production report shall be submitted at the end of each calendar year. This report is due no later than March 31, for the previous year. This report must include operating hours, and amounts of materials processed. Each type of material and each type of process must be listed separately.(P-50-94, Issued July 15, 1994)
 - -Air Toxics Conditions-
- 168. The equipment listed on this permit is subject to Division 26, Part 6, Chapter 1, Section 44300 of the California Health and Safety Code (Air Toxics "Hot Spots" Information and Assessment Act of 1987). Woodland Biomass Power Ltd. is responsible for meeting all requirements and deadlines set forth in the legislation.(P-50-94, Issued July 15, 1994)
- 169. The District reserves the right to require Woodland Biomass Power Ltd. to reevaluate the health risk, if there is a significant change in population, emissions or new health data becomes available. (P-50-94, Issued July 15, 1994)

FUEL MATERIAL RECEIVING AND STORAGE

Federally Enforceable Requirement Conditions

- -Operational Requirements-
- 170. Permitted Process Limits include the following:

Fuel Handling Daily Yearly
1600 tons 260 Mtons

- 171. Operating schedule: 24 hours/day, 7 days/week, 52 weeks/year
- 172. No visible emissions beyond property boundaries are permitted.(P-61-89a, Issued August 15, 1989)
 - -Mitigation and Offsets-
- 173. Woodland Biomass Power Ltd. shall demonstrate on a continuous basis that there is a suitable mix of biomass to satisfy offset requirements. Complete records will be kept, including but not limited to, planned deliveries of biomass materials, source of biomass materials for the next two weeks of operation and actual use of biomass materials during the previous week.(P-61-89a, Issued August 15, 1989)

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- 174. Woodland Biomass Power Ltd. will make all possible effort to obtain biomass inventories including offset materials from open field burning in the following priorities:
 - a) Firstly within 15 miles of the facility.
 - b) Secondly within the Yolo-Solano AQMD.
 - c) Thirdly from counties within the Sacramento Air Basin.(P-61-89a, Issued August 15, 1989)
 - -Monitoring, Record Keeping and Reporting
- 175. The operator shall maintain daily records of the following:
 - a. Operating date and time.
 - b. Quantity of all materials received and stored.(P-61-89a, Issued August 15, 1989)
- 176. Any changes in operating schedule shall be reported to the District immediately.(P-61-89a, Issued August 15, 1989)
- 177. Woodland Biomass Power Ltd. shall maintain a complete central file containing all measurements records and other data that are required to be collected pursuant to the various provisions of this permit accessible to District representatives. (P-61-89a, Issued August 15, 1989)
- 178. An annual throughput/production report shall be submitted at the end of each calendar year. This report is due no later than March 31, for the previous year. This report must include operating hours, and amounts of materials processed. Each type of material and each type of process must be listed separately.(P-61-89a, Issued August 15, 1989)
 - -Air Toxics Conditions-
- 179. The equipment listed on this permit is subject to Division 26, Part 6, Chapter 1, Section 44300 of the California Health and Safety Code (Air Toxics "Hot Spots" Information and Assessment Act of 1987). Woodland Biomass Power Ltd. is responsible for meeting all requirements and deadlines set forth in the legislation.(P-61-89a, Issued August 15, 1989)
- 180. The District reserves the right to require Woodland Biomass Power Ltd. to reevaluate the health risk, if there is a significant change in population, emissions or new health data becomes available. (P-61-89a, Issued August 15, 1989)

RICE HULL RECEIVING AND STORAGE

Federally Enforceable Requirement Conditions

-Operational Requirements-

Woodland Biomass Application #:A-1-96F Page 45 of Page 52 181. Permitted Process Limits include the following:

Hourly Daily Yearly
Receiving 75 tons 300 tons 40 mtons

Metering and 14 tons 300 tons 40 mtons

Conveying (P-34-94, Issued May 2, 1994)

- 182. Operating Schedule: 24 hours/day, 7 days/week, 50 weeks/year. (P-34-94, Issued May 2, 1994)
- 183. No visible emissions beyond property boundaries are permitted.(P-34-94, Issued May 2, 1994)
 - -Mitigation and Offsets-
- 184. Woodland Biomass Power Ltd. shall demonstrate on a continuous basis that there is a suitable mix of biomass to satisfy offset requirements. Complete records will be kept, including but not limited to, planned deliveries of biomass materials, source of biomass materials for the next two weeks of operation and actual use of biomass materials during the previous week. (P-34-94, Issued May 2, 1994)
- 185. Woodland Biomass Power Ltd. will make all possible effort to obtain biomass inventories including offset materials from open field burning in the following priorities:
 - a) Firstly within 15 miles of the facility.
 - b) Secondly within the Yolo-Solano AQMD.
 - c) Thirdly from counties within the Sacramento Air Basin.(P-34-94, Issued May 2, 1994)
 - -Monitoring, Record Keeping and Reporting
- 186. The operator shall maintain daily records of the following:
 - a. Operating date and time.
 - b. Quantity of all materials received and stored. (P-34-94, Issued May 2, 1994)
- 187. Any changes in operating schedule shall be reported to the District immediately.(P-34-94, Issued May 2, 1994)
- 188. Woodland Biomass Power Ltd. shall maintain a complete central file containing all measurements records and other data that are required to be collected pursuant to the various provisions of this permit accessible to District representatives.(P-34-94, Issued May 2, 1994)
- 189. An annual throughput/production report shall be submitted at the end of each calendar year. This report is due no later than March 31, for the previous year. This

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report must include operating hours, and amounts of materials processed. Each type of material and each type of process must be listed separately.(P-34-94, Issued May 2, 1994)

- -Air Toxics Conditions-
- 190. The equipment listed on this permit is subject to Division 26, Part 6, Chapter 1, Section 44300 of the California Health and Safety Code (Air Toxics "Hot Spots" Information and Assessment Act of 1987). Woodland Biomass Power Ltd. is responsible for meeting all requirements and deadlines set forth in the legislation.(P-34-94, Issued May 2, 1994)
- 191. The District reserves the right to require Woodland Biomass Power Ltd. to reevaluate the health risk, if there is a significant change in population, emissions or new health data becomes available. (P-34-94, Issued May 2, 1994)

FLYASH OUTLOADING AND TRANSFER

Federally Enforceable Requirement Conditions

-Operational Requirements-

192. Permitted Process Limits include the following:

FlyashDailyYearlySilo fill rate50 tons18,000 tonsSilo discharge50 tons18,000 tons

(P-91-89a, Issued December 8, 1989)

- 193. Operating schedule: 24 hours/day, 7 days/week, 52 weeks/year. (P-91-89a, Issued December 8, 1989)
- 194. No visible emissions beyond property boundaries are permitted.(P-91-89a, Issued December 8, 1989)
 - -Mitigation and Offsets-
- 195. Woodland Biomass Power Ltd. shall demonstrate on a continuous basis that there is a suitable mix of biomass to satisfy offset requirements. Complete records will be kept, including but not limited to, planned deliveries of biomass materials, source of biomass materials for the next two weeks of operation and actual use of biomass materials during the previous week. (P-91-89a, Issued December 8, 1989)
- 196. Woodland Biomass Power Ltd. will make all possible effort to obtain biomass inventories including offset materials from open field burning in the following priorities:
 - a) Firstly within 15 miles of the facility.

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- b) Secondly within the Yolo-Solano AQMD.
- c) Thirdly from counties within the Sacramento Air Basin.(P-91-89a, Issued December 8, 1989)
- -Monitoring, Record Keeping and Reporting
- 197. The operator shall maintain daily records of the following:
 - a. Operating date and time.
 - b. Quantity of all materials received and stored. (P-91-89a, Issued December 8, 1989)
- 198. Any changes in operating schedule shall be reported to the District immediately.(P-91-89a, Issued December 8, 1989)
- 199. Woodland Biomass Power Ltd. shall maintain a complete central file containing all measurements records and other data that are required to be collected pursuant to the various provisions of this permit accessible to District representatives. (P-91-89a, Issued December 8, 1989)
- 200. An annual throughput/production report shall be submitted at the end of each calendar year. This report is due no later than March 31, for the previous year. This report must include operating hours, and amounts of materials processed. Each type of material and each type of process must be listed separately.(P-91-89a, Issued December 8, 1989)
 - -Air Toxics Conditions-
- 201. The equipment listed on this permit is subject to Division 26, Part 6, Chapter 1, Section 44300 of the California Health and Safety Code (Air Toxics "Hot Spots" Information and Assessment Act of 1987). Woodland Biomass Power Ltd. is responsible for meeting all requirements and deadlines set forth in the legislation. (P-91-89a, Issued December 8, 1989)
- 202. The District reserves the right to require Woodland Biomass Power Ltd. to reevaluate the health risk, if there is a significant change in population, emissions or new health data becomes available. (P-91-89a, Issued December 8, 1989)

ANHYDROUS AMMONIA STORAGE AND RECEIVING

Federally Enforceable Requirement Conditions

203. Permitted Process Limits include the following:

AmmoniaDailyYearlyFill rate107.0 tons107.0 tonsAmmonia injection rate3.3 tons107.0 tons(D. 04.20 Jesued December 2, 1020)

(P-94-89, Issued December 8, 1989)

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- 204. Operating schedule: 24 hours/day, 7 days/week, 365 days/year. (P-94-89, Issued December 8, 1989)
 - -Mitigation and Offsets-
- 205. Woodland Biomass Power Ltd. shall demonstrate on a continuous basis that there is a suitable mix of biomass to satisfy offset requirements. Complete records will be kept, including but not limited to, planned deliveries of biomass materials, source of biomass materials for the next two weeks of operation and actual use of biomass materials during the previous week. (P-94-89, Issued December 8, 1989)
- 206. Woodland Biomass Power Ltd. will make all possible effort to obtain biomass inventories including offset materials from open field burning in the following priorities:
 - a) Firstly within 15 miles of the facility.
 - b) Secondly within the Yolo-Solano AQMD.
 - c) Thirdly from counties within the Sacramento Air Basin.(P-94-89, Issued December 8, 1989)
 - -Monitoring, Record Keeping and Reporting
- 207. The operator shall maintain daily records of the following:
 - a. Operating date and time.
 - b. Quantity of all materials received and stored. (P-94-89, Issued December8, 1989)
- 208. Any changes in operating schedule shall be reported to the District immediately.(P-94-89, Issued December 8, 1989)
- 209. Woodland Biomass Power Ltd. shall maintain a complete central file containing all measurements records and other data that are required to be collected pursuant to the various provisions of this permit accessible to District representatives.(P-94-89, Issued December 8, 1989)
- 210. An annual throughput/production report shall be submitted at the end of each calendar year. This report is due no later than March 31, for the previous year. This report must include operating hours, and amounts of materials processed. Each type of material and each type of process must be listed separately.(P-94-89, Issued December 8, 1989)
 - -Air Toxics Conditions-
- 211. The equipment listed on this permit is subject to Division 26, Part 6, Chapter 1, Section 44300 of the California Health and Safety Code (Air Toxics "Hot Spots" Information and Assessment Act of 1987). Woodland Biomass Power Ltd. is

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- responsible for meeting all requirements and deadlines set forth in the legislation. (P-94-89, Issued December 8, 1989)
- 212. The District reserves the right to require Woodland Biomass Power Ltd. to reevaluate the health risk, if there is a significant change in population, emissions or new health data becomes available. (P-94-89, Issued December 8, 1989)

COOLING TOWERS

Federally Enforceable Requirement Conditions

- -Operational Requirements-
- 213. Permitted Process Limits include the following:

 Hourly

<u>Daily</u> <u>Yearly</u>

Circulation Rate 1.25 MM gal 30 MM gal 11 x 10⁹ gal

Make-up Rate 24 M gal 576 M gal 210 MM gal

(P-74-94, Issued September 30, 1994)

- 214. Operating Schedule: 24 hours/day, 7 days/week, 52 weeks/year.(P-74-94, Issued September 30, 1994)
- 215. No visible emissions beyond property boundaries are permitted.(P-74-94, Issued September 30, 1994)
 - -Mitigation and Offsets-
- 216. Woodland Biomass Power Ltd. shall demonstrate on a continuous basis that there is a suitable mix of biomass to satisfy offset requirements. Complete records will be kept, including but not limited to, planned deliveries of biomass materials, source of biomass materials for the next two weeks of operation and actual use of biomass materials during the previous week. (P-74-94, Issued September 30, 1994)
- 217. Woodland Biomass Power Ltd. will make all possible effort to obtain biomass inventories including offset materials from open field burning in the following priorities:
 - a) Firstly within 15 miles of the facility.
 - b) Secondly within the Yolo-Solano AQMD.
 - c) Thirdly from counties within the Sacramento Air Basin.(P-74-94, Issued September 30, 1994)
 - -Monitoring, Record Keeping and Reporting
- 218. The operator shall maintain daily records of the following:
 - a. Operating date and time.

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- b. Quantity of all materials received and stored.(P-74-94, Issued September 30, 1994)
- 219. Any changes in operating schedule shall be reported to the District immediately.(P-74-94, Issued September 30, 1994)
- 220. Woodland Biomass Power Ltd. shall maintain a complete central file containing all measurements records and other data that are required to be collected pursuant to the various provisions of this permit accessible to District representatives.(P-74-94, Issued September 30, 1994)
- 221. An annual throughput/production report shall be submitted at the end of each calendar year. This report is due no later than March 31, for the previous year. This report must include operating hours, and amounts of materials processed. Each type of material and each type of process must be listed separately.(P-74-94, Issued September 30, 1994)
 - -Air Toxics Conditions-
- 222. The equipment listed on this permit is subject to Division 26, Part 6, Chapter 1, Section 44300 of the California Health and Safety Code (Air Toxics "Hot Spots" Information and Assessment Act of 1987). Woodland Biomass Power Ltd. is responsible for meeting all requirements and deadlines set forth in the legislation.(P-74-94, Issued September 30, 1994)
- 223. The District reserves the right to require Woodland Biomass Power Ltd. to reevaluate the health risk, if there is a significant change in population, emissions or new health data becomes available (P-74-94, Issued September 30, 1994).

Non-Federally Enforceable Conditions (District Enforceable Only) (The following condition is District enforceable it will become immediately Federally enforceable upon promulgation of SIP approval by EPA)

224. WBPL shall not use or allow the use of chromium containing compounds in the treatment of cooling tower circulating water. (Rule 9.3, § c.1)

SAND SCREENING OPERATION

Run Date: April 15, 1998

Federally Enforceable Requirement Conditions

225. Permitted Process Limits include the following:

Sand Throughput 10 tons 3650 tons (P-31-94(a), Issued April 22, 1994)

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- 226. Operating Schedule: 24 hours/day, 7 days/week, 52 weeks/year.(P-31-94(a), Issued April 22, 1994)
- 227. No visible emissions beyond property boundaries are permitted.(P-31-94(a), Issued April 22, 1994)
 - -Mitigation and Offsets-
- 228. Woodland Biomass Power Ltd. shall demonstrate on a continuous basis that there is a suitable mix of biomass to satisfy offset requirements. Complete records will be kept, including but not limited to, planned deliveries of biomass materials, source of biomass materials for the next two weeks of operation and actual use of biomass materials during the previous week.(P-31-94(a), Issued April 22, 1994)
- 229. Woodland Biomass Power Ltd. will make all possible effort to obtain biomass inventories including offset materials from open field burning in the following priorities:
 - a) Firstly within 15 miles of the facility.
 - b) Secondly within the Yolo-Solano AQMD.
 - c) Thirdly from counties within the Sacramento Air Basin.(P-31-94(a), Issued April 22, 1994)
 - -Monitoring, Record Keeping and Reporting
- 230. The operator shall maintain daily records of the following:
 - a. Operating date and time.
 - b. Quantity of all materials received and stored.(P-31-94(a), Issued April 22, 1994)
- 231. Any changes in operating schedule shall be reported to the District immediately.(P-31-94(a), Issued April 22, 1994)
- 232. Woodland Biomass Power Ltd. shall maintain a complete central file containing all measurements records and other data that are required to be collected pursuant to the various provisions of this permit accessible to District representatives. (P-31-94(a), Issued April 22, 1994)
- 233. An annual throughput/production report shall be submitted at the end of each calendar year. This report is due no later than March 31, for the previous year. This report must include operating hours, and amounts of materials processed. Each type of material and each type of process must be listed separately.(P-31-94(a), Issued April 22, 1994)
 - -Air Toxics Conditions-

- 234. The equipment listed on this permit is subject to Division 26, Part 6, Chapter 1, Section 44300 of the California Health and Safety Code (Air Toxics "Hot Spots" Information and Assessment Act of 1987). Woodland Biomass Power Ltd. is responsible for meeting all requirements and deadlines set forth in the legislation.(P-31-94(a), Issued April 22, 1994)
- 235. The District reserves the right to require Woodland Biomass Power Ltd. to reevaluate the health risk, if there is a significant change in population, emissions or new health data becomes available. (P-31-94(a), Issued April 22, 1994)

Evaluating Engineer:	Date:
Associate Air Quality Engineer	
Reviewed By:Supervising Air Quality Specialist	Date:
Reviewed By: Supervising Air Quality Engineer	Date: